



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/813,916	03/22/2001	Mitsuru Muramoto	P66515US0	4256
136	7590	12/28/2004	EXAMINER	
JACOBSON HOLMAN PLLC 400 SEVENTH STREET N.W. SUITE 600 WASHINGTON, DC 20004			PHU, SANH D	
			ART UNIT	PAPER NUMBER
			2682	

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/813,916

Applicant(s)

MURAMOTO ET AL.

Examiner

Sanh D Phu

Art Unit

2682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5 and 6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5 and 6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This Office Action is responsive to the Amendment filed on 8/6/04.

Claim Rejections – 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3, 5 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Dixon (6,275,704), previously cited.

Regarding to claim 1, see Fig. 1, 2, 3, 4, 5, 6, 7 and 11, Dixon discloses a radio system that divides a certain region into two or more cells (103) and installs a base station (104) at about the center of each cell to carry

Art Unit: 2682

out communication between the base station (104) and many fixed terminal stations (102) in the cell in which the base station is installed, wherein

each base station (104) uses a frequency group (which is inherently comprises two or more frequencies from a set of frequencies) (see col. 6, lines 64–65) (see also the definitions of the word “group”, on page 551 of “Webster’s II new Riverside university dictionary”, additionally cited in this Office Action), and is divided into two or more sectors (307), each of which is provided with an antenna different in directivity on a horizontal plane (see Fig. 9A and 9B), the antennas are so placed that the antenna beams cover all the directions on the horizontal plane as a whole (to cover sectors L, R), and all the antennas using the same frequency and the same polarized wave are so arranged to face in about the same direction (see Fig. 3, 4, 5, col. 3, line 62 to col. 7, line 58).

Regarding to claim 3, Dixon discloses that said radio system, which installs base stations to offer service in almost all the parts of the certain region using only one type of polarized wave, further installs base stations using another type of polarized wave in the existing service area (see Fig. 3, 4, 5, col. 3, line 62 to col. 7, line 58).

Regarding to claim 5, Dixon discloses that the number of sectors at each base station and assignment of frequencies used and polarized waves correspond to those at adjacent base stations (see Fig. 7, col. 8, lines 31– 58).

Regarding to claim 6, Dixon discloses that said radio system uses a TDD system (see col. 4, lines 22–24).

Response to Arguments

3. Applicant's arguments filed on 8/6/04 have been fully considered but they are not persuasive. The applicant mainly argues that with respect to claim 1, Dixon does not disclose the limitation “each base station uses plural frequencies in each cell”.

The examiner respectfully disagrees. As explained above in the Office Action, Dixon discloses that each base station uses a frequency group (which is inherently comprises two or more frequencies from a set of frequencies) (col. 6, lines 64–65) (see also the definitions of the word “group”, on page 551 of “Webster’s II new Riverside university dictionary”, additionally cited in this Office Action).

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

5. Reference "Webster's II new Riverside university dictionary", page 551, is additionally cited because it pertinent to the claimed system.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanh D Phu whose telephone number is (703) 305-8635. The examiner can normally be reached on 8:00-16:30.

Art Unit: 2682

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 703-301-6739. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-9817.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-8635.

Sanh D. Phu
Examiner
Art Unit 2682

SP


LEE NGUYEN
PRIMARY EXAMINER